<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Fidgeting in Hong Kong adolescents and its associations with physical activity and weight status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td>Yung, DHY; Ho, DSY; Lo, WS; Lam, TH</td>
</tr>
<tr>
<td><strong>Citation</strong></td>
<td>The 2014 East-West Alliance Global Symposia, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, 27-28 October 2014.</td>
</tr>
<tr>
<td><strong>Issued Date</strong></td>
<td>2014</td>
</tr>
<tr>
<td><strong>URL</strong></td>
<td><a href="http://hdl.handle.net/10722/207863">http://hdl.handle.net/10722/207863</a></td>
</tr>
<tr>
<td><strong>Rights</strong></td>
<td>This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.</td>
</tr>
</tbody>
</table>
Introduction

What is fidgeting?
- Fidgeting is the engagement of physical movements which are not vital to the current focal tasks
  - Ex. tapping feet, twirling hair
- Energy expended may accrue to have a significant impact on total daily energy expenditure
- Potential implications on obesity
- Studies on fidgeting are few and none have been conducted in Hong Kong adolescents

Objective: To investigate the prevalence of fidgeting in Hong Kong adolescents and its associations with physical activity and weight status.

Methods

Study design
- Hong Kong Obesity Surveillance (HKSOS) Project 2006-07
- 42 randomly selected schools
- 34678 students (mean age 14.6, SD 2.0, boys 44.1%)

Measurements (Questionnaire)
- Fidgeting (“Has anyone described you as can’t sit still/never stopping/always fidgeting?”)
  - “Always”/“Sometimes” → Fidget
  - “Rarely”/“Never” → Non-fidget
- Weight and height
- Exercise
- Non-exercise physical activity (NEPA)
- Sedentary screen time (TV and computer use)

Analysis
- Logistic regressions
- Adjusted for potential confounders and school clustering

Results

Key Message 1: Prevalence of fidgeting was 38.2% (95% CI 37.7%-38.7%)

Key Message 2: Fidgeting was associated with increased levels of daily exercise, non-exercise physical activity (NEPA) and screen time

Key Message 3: Fidgeting was not significantly associated with weight status
- Adjusted odds ratios (AOR, 95% CI) below:

<table>
<thead>
<tr>
<th></th>
<th>Underweight vs. normal</th>
<th>Overweight/obese vs. normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-fidgeting</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fidgeting</td>
<td>0.93 (0.82 – 1.05)</td>
<td>0.96 (0.88 – 1.04)</td>
</tr>
</tbody>
</table>

Conclusions

- Fidgeting is prevalent in Hong Kong adolescents
- Fidgeting is associated with exercise, NEPA and screen time
- Our results do not support an independent association between fidgeting and weight status
- Implications: Future studies should investigate whether discouraging fidgeting is harmful and encouraging fidgeting is beneficial to exercise and NEPA levels

Funding: University Research Committee, Strategic Research Theme on Public Health, The University of Hong Kong